

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

ASADA et al.

Group Art Unit: Unknown

Appln. No.: Unassigned

Examiner: Unknown

Filed: August 7, 2001

Title: VOLTAGE REGULATOR OF VEHICLE
AC GENERATOR

#4
ms
C. J. J. J.
12/20

31033 U.S. PTO
09/19/2001
08/07/01

* * * * *

August 7, 2001

INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner for Patents
Washington, D.C. 20231

Sir:

Attached is a Form PTO-1449 listing the cited documents.


This Information Disclosure Statement is being filed within 3-months of the filing date of this application.

This Information Disclosure Statement is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicants to comply fully.

Consideration of the foregoing and enclosures plus the return of a copy of the enclosed Form PTO-1449 with the Examiner's initials in the left column per MPEP §609 along with an early action on the merits of this application are earnestly solicited.

Respectfully submitted,

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RELATED ART LIST

IPICS REF: 57170-US

FOR INFORMATION DISCLOSURE STATEMENT

DOCUMENTS CITED IN THE APPLICATION

In PTO-1449 form, identify page Nos. where the following documents are referred to.

DOCUMENT NO.	PAGE NO.	ENGLISH COUNTERPART
<input checked="" type="checkbox"/> JP-B2-2529273	1	<input type="checkbox"/> None
<input checked="" type="checkbox"/> JP-B2-3019377	1	<input type="checkbox"/> None
<input type="checkbox"/> NONE KNOWN: There is no known document which describes the background art referenced in the specification.		

USA APPLICATIONS OF APPLICANT

SERIAL NO.	INVENTOR	FILING DATE	JP COUNTERPART	YOUR/OUR REF.
<input type="checkbox"/>			<input type="checkbox"/>	
<input type="checkbox"/>			<input type="checkbox"/>	

OTHER DOCUMENTS (PATENT)

DOCUMENT NO.	NOTE: English counterpart etc.
<input type="checkbox"/> JP-A-5-191956	<input checked="" type="checkbox"/> USP 5424594
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

OTHER DOCUMENTS (NON-PATENT)

<input type="checkbox"/>
<input type="checkbox"/>

☒:Enclosed

J1033 U.S. PTO
09/922918
08/07/01



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recherche

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KUHNEN & WACKER
Patentanwalts-gesellschaft mbH

Eing. - 2. Nov. 2001

Frist

Datum/Date

05.11.01

Zeichen/Ref./Réf.

56 ND 01 L 46

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

01118986.7-2207-

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

Denso Corporation

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☒ title

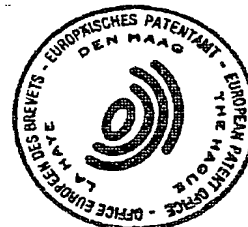
☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

1

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 11 8986

サーチレポート

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	US 5 936 440 A (ASADA TADATOSHI ET AL) 10 August 1999 (1999-08-10)	1-5	H02J7/24 H02P9/30
A	* column 1, line 36 - column 2, line 9 * * column 2, line 45 - column 6, line 56; figures 1-5 *	6,7	
Y	WO 00 27032 A (FISCH ALFONS ;MAGRUDER ANGELA MURCH (US); SIEMENS AUTOMOTIVE CORP) 11 May 2000 (2000-05-11) * abstract * * page 2, line 4 - page 3, line 2 * * page 4, line 19 - page 7, line 6 * * page 7, line 15 - page 16, line 15; figures 2-4 *	1-5	
A	YEE H P: "AN EMI SUPPRESSION MOSFET DRIVER" APEC '97. TWELTH ANNUAL APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION. ATLANTA, FEB. 23 - 27, 1997, APEC. ANNUAL APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION, NEW YORK, IEEE, US, vol. 1 CONF. 12, 23 February 1997 (1997-02-23), pages 242-248, XP000736191 ISBN: 0-7803-3705-0 * the whole document *	1,2	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H02J H02P H03K H02M
A	DE 197 55 653 A (HITACHI LTD ;HITACHI CAR ENG CO LTD (JP)) 2 July 1998 (1998-07-02) * abstract; figures 1,3 * * column 1, line 3 - column 3, line 3 * * column 4, line 51 - column 7, line 64 * -/--	1-7	
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 23 October 2001	Examiner Braccini, R
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04C01)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 234 (E-1543), 28 April 1994 (1994-04-28) & JP 06 022470 A (HITACHI LTD), 28 January 1994 (1994-01-28) * abstract *	1-7	
A	EP 0 678 983 A (ST MICROELECTRONICS SRL) 25 October 1995 (1995-10-25) * abstract; figures 1,2 * * column 2, line 52 - column 3, line 2 *	1	
A	GB 2 318 467 A (INT RECTIFIER CORP) 22 April 1998 (1998-04-22) * abstract * * page 2, line 1 - page 4, line 9 * * page 6, line 1 - page 6, line 26 * * figures 1A,1C,3,4B,4C *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 23 October 2001	Examiner Braccini, R
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</div> <div>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</div>			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 11 8986

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-10-2001

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5936440	A	10-08-1999	JP	10174310 A	26-06-1998
WO 0027032	A	11-05-2000	AU	1459700 A	22-05-2000
			EP	1127409 A1	29-08-2001
			WO	0027032 A1	11-05-2000
DE 19755653	A	02-07-1998	JP	10178340 A	30-06-1998
			DE	19755653 A1	02-07-1998
JP 06022470	A	28-01-1994	JP	2815265 B2	27-10-1998
			DE	4321970 A1	05-01-1994
			US	5448154 A	05-09-1995
EP 0678983	A	25-10-1995	EP	0678983 A1	25-10-1995
			DE	69412788 D1	01-10-1998
			DE	69412788 T2	29-04-1999
			JP	2907752 B2	21-06-1999
			JP	8056147 A	27-02-1996
			US	5623216 A	22-04-1997
GB 2318467	A	22-04-1998	DE	19745218 A1	23-04-1998
			FR	2754958 A1	24-04-1998
			GB	2351860 A , B	10-01-2001
			IT	1295361 B1	12-05-1999
			JP	10173500 A	26-06-1998
			US	6127746 A	03-10-2000